

## **INDUCTION HEATING SYSTEM FOR REDUCED SWITCH STRESS**

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### **Abstract**

10 An induction heating system is provided. The induction heating system comprises a power switch, a resonant heating circuit, and a pulse initiator. The resonant heating circuit is configured to generate an oscillating voltage in response to a DC pulse input. The pulse initiator is positioned across the power switch and configured to monitor a voltage across the power switch and to initiate application of a subsequent DC pulse to the resonant heating circuit upon detecting a substantially zero voltage crossing at the power switch during a first cycle of the oscillating voltage.

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